

UNDERSTANDING DATA CENTERS

What are data centers, what do they power, and what's at stake for Northwest Indiana?

THE CLOUD IS JUST A BUILDING

When you back up a photo or stream a show, it doesn't float into the sky. It lands in a real building — concrete floor, loading dock, security guard — in a real community. Data centers are the physical foundation of the modern information economy, as central to daily life as electricity itself.

WHAT DATA CENTERS POWER



Data centers run the everyday services people rely on: email, streaming, search, e-commerce, banking, social media, work tools, and cloud storage.



They go further: AI-assisted breast screening has detected 17.6% more cancers without increasing recalls, automatic emergency braking has cut crashes by 50%, and AlphaFold has openly published structures for more than 200 million proteins for researchers worldwide.

ADDRESSING COMMON CONCERNS

01. ELECTRICITY

In practice, large, steady customers often lower long-term prices by signing contracts that make it economical to build new generation and more reliable transmission. Models project a 3.4% reduction for consumers in most cases, and it's estimated that NIPSCO will return \$1.4 billion in savings due to data center agreements.

02. WATER

All U.S. data centers combined consumed less water in 2023 than U.S. irrigation used in just three hours. Microsoft's newest closed-loop design uses zero water for cooling, saving roughly 33 million gallons per facility per year, and 90% of Microsoft's fleet already runs on low- or zero-water cooling. Google, Amazon, and Meta have all pledged to replenish more water than they consume by 2030.

03. NOISE

Modern data centers are quieter than most people expect. Standing next door, you'd typically measure about 40 to 45 decibels, roughly the sound of a library or a quiet conversation. The backup generators only kick on for about 10 to 15 hours a year, almost entirely for scheduled testing.